COMMENT ON LI ET AL.

Time Trends of Dietary and Lifestyle Factors and Their Potential Impact on Diabetes Burden in China. Diabetes Care 2017;40:1685–1694

Anna Vittoria Mattioli, Francesca Coppi, and Alberto Farinetti

We have read with great interest the article by Li et al. (1). We found their conclusion to be important in view of clinical prevention. They found that a high BMI and low intake of whole grains but high intake of refined grains are the most important individual risk factors related to Chinese diabetes burden; low physical activity and high blood pressure also significantly contributed.

Moreover, they reported that intakes of processed meat, red meat, and sugar-sweetened beverages showed increasing trends over time and were responsible for 2.8, 1.8, and 0.5 million diabetes cases, respectively, in 2011.

With reference to the findings reported in the article, we would like to make the following contribution to the discussion. In a recent analysis performed on 650 healthy women of premenopausal age (range 45–54 years), we analyzed table sugar added to tea, coffee, and beverages that included caffeine (i.e., cappuccino, cola soda). Patients were categorized according to quartile of adherence to the Mediterranean diet. We reported that sugar added to beverages was higher in women in the low quartile of adherence to the Mediterranean diet (low Med Score). This subgroup of women had a lower ankle-brachial index, a marker of asymptomatic atherosclerosis, compared with women with a high Med Score. Coffee and tea were similarly distributed among the quartiles of Med Score (2); however, sugar added to these beverages was higher in women drinking tea as compared with women drinking coffee (3.2 ± 1.3 vs. 1.5 ± 1.7 spoons/day; $P < 0.05$). Analysis from diet recall had the major limitation of missing data regarding out-of-mealtime snacking and drinking.

Evaluation of sugar totals found that the intake of free sugar from fruit was higher in women in the highest quartile of the Mediterranean diet. However, we would like to underline that this quartile of the Mediterranean lifestyle is characterized by a high intake of antioxidants, mainly from fruit and vegetables (3). In our population, coffee consumption was high but was mainly related to espresso coffee and cappuccino that included two shots of espresso coffee.

In Mediterranean countries, coffee and wine are strong antioxidant sources; however, tea is consumed relatively less among women. Because of the controversial effect of caffeine on cardiovascular disease, it is possible that the small amount of caffeine positively influenced the outcome in addition to the reduced intake of sugar added to beverages (3,4). Consumption of cola soda and energy drinks was small in this selected population of premenopausal women because of the mean age of the population, as these beverages are consumed more by the young population (5). We concluded that women with low adherence to the Mediterranean diet are more likely to add sugar to their beverages, are more obese, and are more likely to have asymptomatic atherosclerosis, as suggested by a low ankle-brachial index.

Duality of Interest. No potential conflicts of interest relevant to this article were reported.

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Surgical, Medical and Dental Department of Morphological Sciences related to Transplant, Oncology and Regenerative Medicine, University of Modena and Reggio Emilia, Modena, Italy

Corresponding author: Anna Vittoria Mattioli, annavittoria.mattioli@unimore.it.